



Fast Track Proposed Regulation Agency Background Document

| | |
|----------------------------------|--|
| Approving authority name | State Air Pollution Control Board |
| Primary action | 9VAC5-10 |
| Secondary action(s) | None |
| Regulation title | Regulations for the Control and Abatement of Air Pollution |
| Action title | Definition of Volatile Organic Compound (H07) |
| Document preparation date | November 3, 2008 |

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The general definitions of 9VAC5-10 impose no regulatory requirements in and of themselves but provide support to other provisions of the Regulations for the Control and Abatement of Air Pollution (9VAC5-10 through 9VAC5-80). The definition of volatile organic compound (VOC) has been revised to add a compound that has been demonstrated to be less reactive to the list of substances that are not considered to be VOCs: (1)1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300).

Statement of final agency action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

On October 23, 2008, the State Air Pollution Control Board took final action to adopt amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution," specifically, General Definitions (9VAC5-10). The regulatory action is to be effective as provided in the Administrative Process Act.

Legal basis

Please identify the section number and provide a brief statement relating the content of the statutory authority to the specific regulation proposed. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments is available upon request.

Purpose

Please provide a statement explaining the rationale or justification of the proposed regulation as it relates to the health, safety or welfare of citizens.

The purpose of the regulation (general definitions) is not to impose any regulatory requirements in and of itself, but to provide a basis for and support to other provisions of the Regulations for the Control and Abatement of Air Pollution, which are in place in order to protect public health and welfare. The proposed amendments are being made to ensure that the definition of VOC, which is crucial to most of the regulations, is up-to-date and scientifically accurate, as well as consistent with the overall EPA requirements under which the regulations operate.

Rationale for using fast track process

Please explain the rationale for using the fast track process in promulgating this regulation.

Please note: If an objection to the use of the fast-track process is received within the 30-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall (i) file notice of the objection with the Registrar of Regulations for publication in the Virginia Register, and (ii) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.

The definition is being revised to add a less-reactive substance to the list of compounds not considered to be VOCs. As discussed in greater detail elsewhere, this revision is not expected to affect a significant

number of sources or have any significant impact, other than a positive one, on air quality overall. Additionally, removal of the substance at the federal level was accompanied by detailed scientific review and public comment, and no additional information on the reactivity of this substance or the appropriateness of its removal is anticipated.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (Provide more detail about these changes in the "Detail of changes" section.)

The general definitions impose no regulatory requirements in and of themselves but provide support to other provisions of the Regulations for the Control and Abatement of Air Pollution (9VAC5-10 through 9VAC5-80). The list of substances not considered to be VOCs in Virginia has been revised to include (1)1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300).

Issues

Please identify the issues associated with the proposed regulatory action, including: (1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; (2) the primary advantages and disadvantages to the agency or the Commonwealth; and (3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

- 1. Public: The general public health and welfare will benefit because the revision will encourage the use of products containing the less-reactive substance in place of products containing more reactive and thereby more polluting substances, ultimately resulting in fewer emissions of VOCs and reduced production of ozone, which results from VOC emissions. Companies that use this substance in place of more reactive substances may also benefit by reducing their VOC emissions and concomitant reductions in permitting and other regulatory requirements.
- 2. Department: The revision will allow the department to focus VOC reduction strategies on substances that are more responsible for ozone formation and greenhouse gas generation.

Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

There is no locality which will bear any identified disproportionate material air quality impact due to the proposed regulation which would not be experienced by other localities.

Public participation

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal and the impacts of the regulation on farm or forest land preservation.

In addition to any other comments, the department is seeking comments on the costs and benefits of the proposal, the potential impacts on the regulated community and on any impacts of the regulation on farm and forest land preservation.

The department accepts written comments by email, facsimile transmission and postal mail. In order to be considered, written comments must include the full name, address and telephone number of the person commenting and be received by the department by 5:00 p.m. on the last day of the comment period. The department prefers that comments be provided in writing, along with any supporting documents or exhibits. All testimony, exhibits and documents received are part of the public record.

All comments requested by this document must be submitted to the agency contact: Karen G. Sabasteanski, Policy Analyst, Office of Air Regulatory Development, Department of Environmental Quality, P.O. Box 1105, Richmond, Virginia, 23218 (email kgsabastea@deq.virginia.gov, fax 804-698-4510). Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at: www.townhall.virginia.gov. Requests for documents and additional information may also be submitted to the agency contact.

Economic impact

Please identify the anticipated financial impact of the proposed regulation and at a minimum provide the information specified below. Also include a description of the beneficial impact the regulation is designed to produce.

| | |
|---|--|
| <p>a. Description of the individuals, businesses or other entities likely to be affected by the regulation.</p> | <p>HFE-7300 has a variety of potential uses such as a heat transfer fluid, coating, cleaner, and lubricant. It may be used in (i) coating deposition applications, (ii) heat-transfer fluids in heat-transfer processes, (iii) to clean organic and/or inorganic substrates, and (iv) to formulate working fluids or lubricants for machinery operations and manufacturing processes.</p> |
| <p>b. Agency’s best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</p> | <p>No sources located in Virginia currently use this substance. There are sources that may some day eventually wish to use this substance; however, the department has not identified any specific sources that plan to do so.</p> |
| <p>c. Projected cost of the regulation for affected individuals, businesses, or other entities. Please be specific. Be sure to include the projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses.</p> | <p>Because there are currently no sources in the state using this substance, no source would realize any cost savings associated with the removal of the substance as a VOC. A source that is not currently using this substance but at some point does choose to use it may do so in order to realize a cost savings; in the absence of any currently interested sources, the department has no way of quantifying any potential savings.</p> |
| <p>d. Projected cost to the state to implement and enforce the proposed regulation, including (a) fund source / fund detail, and (b) a delineation of one-time versus on-going</p> | <p>It is not expected that the regulation will result in any cost to the department beyond that currently in the budget. The sources of department funds to carry out this regulation are the general fund and</p> |

| | |
|---|--|
| <p>expenditures.</p> | <p>the federal trust (grant money provided by the U.S. Environmental Protection Agency under § 105 of the federal Clean Air Act or permit fees charged to affected entities under the permit program). The activities are budgeted under the following program (code)/subprogram (code): (i) Environmental and Resource Management (5120000)/Air Quality Stationary Source Permitting (5122000) and Air Quality Stationary Source Compliance Inspections (5122100) and (ii) Environmental Research and Planning (5130000)/Air Quality Research and Planning (5130700). The costs are expected to be ongoing.</p> |
| <p>e. Projected cost of the regulation on localities.</p> | <p>The projected cost of the regulation on localities is not expected to be beyond that of other affected entities and are addressed in item c above.</p> |
| <p>f. Beneficial impact the regulation is designed to produce.</p> | <p>The revision may encourage the use of products containing the less-reactive substance in place of products containing more reactive and thereby more polluting substances. This may ultimately result in fewer emissions of VOCs and reduced production of ozone, which results from VOC emissions. This would benefit public health and welfare, the amount of which would depend on the number of companies, if any, that anticipate a financial benefit from switching products. Companies that use this substance in place of more reactive substances may also benefit by reducing their VOC emissions and concomitant reductions in permitting and other regulatory requirements; again, the specific amount of which depending on the number of companies that opt to switch products. At this time, there are no known sources in the state currently using this substance, and no sources have expressed interest to the department in making such a switch.</p> <p>The department and the public will benefit by having a definition that is consistent with the federal definition; this will make the regulation more user-friendly, and eliminate confusion.</p> |

Legal requirements

Please identify the state and/or federal source of the legal requirements that necessitate promulgation of the proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly bill and chapter numbers, if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal requirements and the extent to which the requirements are mandatory or discretionary.

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Federal Requirements

Sections 109 (a) of the Clean Air Act requires EPA to prescribe national ambient air quality standards (NAAQS) to protect public health. Section 110 mandates that each state adopt and submit to EPA a plan (the state implementation plan or SIP) which provides for the implementation, maintenance, and enforcement of the NAAQS. Ozone, one of the pollutants for which there is a NAAQS, is in part created by emissions of VOCs. Therefore, in order to control ozone, VOCs must be addressed in Virginia's SIP.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of SIPs. Subpart F of Part 51, Procedural Requirements, includes § 51.100, which consists of a list of definitions. 40 CFR 51.100 contains a definition of VOC. This definition is revised by EPA in order to add or remove VOCs as necessary. If, for example, it can be demonstrated that a particular VOC is "negligibly reactive" (that is, if it can be shown that a VOC is not as reactive or makes a significant contribution to ozone formation), then EPA may remove that substance from the definition of VOC.

On January 18, 2007 (72 FR 2193), EPA revised the definition of VOC in 40 CFR 51.100 to exclude a compound known as (1)1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300) from the definition of VOC. This exclusion is accomplished by adding the substance to a list of substances not considered to be a VOC. This change to the exemption list became effective on January 18, 2007.

State Requirements

These specific amendments are not required by state mandate. Rather, Virginia's Air Pollution Control Law gives the State Air Pollution Control Board the discretionary authority to promulgate regulations "abating, controlling and prohibiting air pollution throughout or in any part of the Commonwealth" (§ 10.1-1308 A). The law defines such air pollution as "the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people or life or property" (§ 10.1-1300).

Comparison with federal requirements

Please identify and describe any requirement of the proposal which are more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

The proposed regulation amendments are not more restrictive than the applicable legal requirements.

Need

Please explain the need for the new or amended regulation and the potential consequences that may result in the absence of the regulation. Detail the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

VOCs are regulated because they contribute to the formation of ground level ozone, which has a negative impact on human health and welfare. EPA has concluded that HFE-7300 has an insignificant impact or no impact on the formation of ground level ozone. Individual VOCs may also be regulated by EPA as hazardous air pollutants (HAPs) or by the department as air toxics. HAPs and air toxics are pollutants

which can cause cancer and other serious health effects. HFE-7300 is not regulated as a HAP or air toxic, and EPA has concluded that it has low toxicity. HFE-7300 has a variety of potential uses such as a heat transfer fluid, coating, cleaner, and lubricant. The proposed de-listing may benefit air quality in Virginia, because exempting HFE-7300 allow the environmental benefit of substituting HFE-7300 for other substances that deplete the earth's protective ozone layer and have high global warming potential.

Alternatives

Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in §2.2-4007.1 of the Code of Virginia, of achieving the purpose of the proposal.

Alternatives to the proposed regulation amendments were considered by the department. The department determined that the first alternative is appropriate, as it is the least burdensome and least intrusive alternative that fully meets the purpose of the regulation. The alternatives considered by the department, along with the reasoning by which the department has rejected any of the alternatives being considered, are discussed below.

1. Amend the regulations to satisfy the provisions of the law and associated regulations and policies. This option was chosen because it meets the stated purpose of the regulation: to protect public health and welfare through the reduction of ozone-creating substances.
2. Make alternative regulatory changes to those required by the provisions of the law and associated regulations and policies. This option was not chosen because it would not meet the stated purpose of the regulation.
3. Take no action to amend the regulations and continue to use an outdated definition in the regulations. This option was not chosen because it would not meet stated purpose of the regulation.

Regulatory Flexibility Analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: (1) the establishment of less stringent compliance or reporting requirements; (2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) the consolidation or simplification of compliance or reporting requirements; (4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposal; and (5) the exemption of small businesses from all or any part of the requirements contained in the proposal.

The regulations apply to all facilities, including small businesses. Any (1) establishment of less stringent compliance or reporting standards; (2) establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) consolidation or simplification of compliance or reporting requirements; (4) establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; or (5) exemption of small businesses from all or any part of the requirements contained in the proposed regulation for all small businesses would directly, significantly and adversely affect the benefits that would be achieved through the implementation of the regulations.

Family impact

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: (1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; (2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; (3) strengthen or erode the marital commitment; and (4) increase or decrease disposable family income.

It is not anticipated that these regulation amendments will have a direct impact on families. However, there will be positive indirect impacts in that the regulation amendments will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.

Detail of changes

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail all new provisions and/or all changes to existing sections.

If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all changes between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.

| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
|-------------------------------|---|---|---|
| 9 VAC 5-10-20 | | Definition of VOC does not include (1)1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300) on the list of substances not considered to be VOC. | Revise definition of VOC to include (1)1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300) on the list of substances not considered to be VOC. Needed for public health and welfare benefit, and consistency with federal requirements. |

Periodic review

Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable regulatory goals should be outlined with this schedule. The review shall take place no later than four years after the proposed regulation is expected to be effective.

The department will initiate a review and re-evaluation of the regulation to determine if it should be continued, amended, or terminated within four years after its effective date.

The general definitions impose no regulatory requirements in and of themselves but provide support to other provisions of the Regulations for the Control and Abatement of Air Pollution (9VAC5-10 through 9VAC5-80). Therefore, there are no specific and measurable goals the definitions are intended to achieve.

Clarity

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

The department, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

TEMPLATES\FAST TRACK\TH04
REG\DEV\H07-04TF